Seattle Youth Violence Prevention Initiative
Report to City Council
Public Safety and Education Committee
March 16, 2011 Update

2010 End of Year Report on Investment Area Indicators

Referral, Intake and Screening

Indicators	2010 Planned Target	2010 Actuals	% Completed
Total number of youth referred who are SYVPI priority populations*	440		
85% of eligible youth complete the Intake and Screening process (as evidenced by agreeing to and signing off on the goals established for youth/family)	374	607	162%
80% of eligible youth are still engaged in services at 3 months.	299	499	167%
70% of eligible youth are still engaged in services at 6 months.	262	222	85%
60% of eligible youth are still engaged in services at 12 months.	224	103	46%

*Number of total referrals not tracked in new database; only enrolled youth.

Case Management

Indicators	2010 Planned Target	2010 Actuals	% Completed
Number of youth served in the SYVPI Network Neighborhoods	385	405	105%
• Fulfillment of probation or community services requirements • Reduction of discipline referrals, suspensions and/or expulsions • Reduction of criminal referrals, admissions, detention days • Reduction in gang-related behavior or exit from gang	212	50	24%
• Complete GED/Graduate • Progress to the next grade level, or graduate from high school • Increase quarterly school attendance	231	176	76%
• Successful completion in a treatment program such as substance abuse, mental health, family counseling, etc. • Enrollment and participation in a community service program in the areas of recreation, music, arts, dance, sports, etc. • Number of youth engaged in service for six months/one year without restrictions or sanctions related to violent behavior	231	201	87%

Aggression Replacement Training (ART)

Indicators	2010 Planned Target	2010 Actuals	% Completed
Total number of youth referred	128	123	96%
75% of youth who are referred to ART enroll	96	58	60%
75% of enrolled participants attended 70% of ART training	72	26	36%
70% of participants increase in Pro-Social Skills	67	26	39%
70% of participants increase positive behaviors and moral reasoning	67	26	39%
70% of participants increase self efficacy	67	26	39%
90% of participants learn alternatives to aggression	86	26	30%

Youth Employment

Indicators	2010 Planned Target	2010 Actuals	% Completed
Number of youth served in the Network Neighborhoods	225	266	118%
Number/percentage (88%) of youth completing the program (internship, community project, etc.)	197	195	99%
Number/percentage (80%) of youth who report to internship or job readiness training activity at least 85% of the days they are scheduled to do so.	178	181	102%
Number/percentage of youth who are punctual to internship or job readiness training activity at least 85% of the time	178	190	107%
Number/percentage of youth who receive positive performance evaluations regarding work relationships and/or interpersonal behaviors	177	186	105%
Number/percentage of youth who are evaluated as demonstrating “good” or “excellent” job competency skills by end of internship or group project	177	159	90%
Number/percentage of youth who obtain unsubsidized employment	24	8	33%

Mentoring

Indicators	2010 Planned Target	2010 Actuals	% Completed
Number of youth participating in mentoring	113	107	95%
85% of matches spend 2 hours together per week	96	93	97%
75% of matches last 3 months (Includes 9 matches made during the last quarter of 2009 and 95 projected matches to be made the end of the 3rd quarter of 2010)	78	75	96%
50% of matches last 12 months (based on the 13 matches that were made by the end of 2009)	7	8	114%

Specific performance targets for each of the three Networks have been established as follows:

Central Area Network

Performance Commitments	Targets 2009	2009 Actuals	% complete	Targets 2010	2010 Actuals	% complete
1) Number of Youth/Family completing intake and assessment as evidenced by agreeing to and signing off on the goals established for youth/family	144	140	97%	125	154	123%
2) Number of youth still engaged in services at three months	63	75	119%	100	47	47%
3) Number of youth still engaged in services at six months				87	41	47%
4) Number of youth a still engaged in services at twelve months				30	14	47%

Southeast Area Network

Performance Commitments	Targets 2009	2009 Actuals	% complete	Targets 2010	2010 Actuals	% complete
1) Number of Youth/Family completing intake and assessment as evidenced by agreeing to and signing off on the goals established for youth/family	144	220	153%	125	203	162%
2) Number of youth still engaged in services at three months	63	70	111%	100	81	81%
3) Number of youth still engaged in services at six months				87	65	75%
4) Number of youth a still engaged in services at twelve months				30	27	90%

Southwest Area Network

Performance Commitments	Targets 2009	2009 Actuals	% complete	Targets 2010	2010 Actuals	% complete
1) Number of Youth/Family completing intake and assessment as evidenced by agreeing to and signing off on the goals established for youth/family	144	272	189%	125	250	200%
2) Number of youth still engaged in services at three months	63	81	129%	100	133	133%
3) Number of youth still engaged in services at six months				87	116	133%
4) Number of youth a still engaged in services at twelve months				30	62	206%

Additional Indicators:
Parks Power of Place Extended Hours Programming

	2010 Planned Target	2010 Actuals	% Completed
Total Number youth served in the Extended Hours Programs 3sites	**400**	**239**	**60%**
• Number of youth completing youth designed programs	300	239	80%
• Number of youth increasing their attendance in multiple programming	180	104	58%
• Number of youth that maintain program participation throughout the year	180	239	133%
• Number of youth involved in academic, literacy and enrichment programs	360	182	51%
• Number of youth who participate without trespass	260	221	85%

Street Outreach (Urban League)

Indicators	2010 Planned Target	2010 Actuals	% Completed
Number of valid youth referrals completed by Outreach Team	192	192	100%
Number of youth enrolled in Planning Ahead to Determine Your Success (PADS Program, a group mentoring program offering incentives for personal goal achievement)	45	48	107%
Number of youth earning points in 3 of 9 domains in PADS Program	38	25	66%
Number of youth earning points in 6 of 9 domains in PADS Program	33	15	45%
Number of youth earning points in 9 of 9 domains in PADS Program	28	4	14%

2011 Year to Date Report on Investment Area Indicators

As of January 31, 2011

Referral, Intake and Screening

Indicators	2011 Planned Target	January Actuals	% Completed
Total number of youth referred who are SYVPI priority populations*	591		
85% of eligible youth complete the Intake and Screening process (as evidenced by agreeing to and signing off on the goals established for youth/family)	450	39	9%
80% of eligible youth are still engaged in services at 3 months.	360	0	0%
70% of eligible youth are still engaged in services at 6 months.	315	0	0%
60% of eligible youth are still engaged in services at 12 months.	270	0	0%

*Number of total referrals not tracked in new database; only enrolled youth.

Case Management

INDICATORS:	2011 Planned Target	January Actuals	% Completed
Number of youth served in the SYVPI Network Neighborhoods	**340**	**307**	**90%**
Number of unduplicated youth in case management who achieve one or more of the following service plan goals: reduced criminal involvement, improved school success, increased involvement in pro-social activities, increased employability skills, and/or engagement in treatment.*	227	6	3%
Number of additional, approved service plan goals achieved	109	0	0%

* Approved Service Plan Goals by Goal Type

Aggression Replacement Training

INDICATORS:	2011 Planned Target	January Actuals	% Completed
Total number of youth referred	58	12	21%
Number of youth who enroll in ART	36	10	28%
Number of participants who increase in pro-social skills	18	0	0%
Number of participants who increase positive behaviors and moral reasoning	18	0	0%
Number of participants who demonstrate improved anger control	18	0	0%
Number of enrolled participants who attend 70% of ART training and learn alternatives to aggression	18	0	0%

Youth Employment

INDICATORS:	Total 2011 Targets	January Actuals	% Completed
Unduplicated youth complete Individualized Service Plan (ISP) and enroll in youth employment programs.	243	9	4%
Unduplicated youth begin subsidized internship or group project.	229	9	4%
Unduplicated youth report to work or job-readiness training at least 85% of the days they are scheduled to do so (for the duration of the program).	171	0	0%
Unduplicated youth successfully complete subsidized employment.	190	0	0%
Unduplicated youth maintain compliance with successful completion of court-ordered conditions and community supervision.	20	0	0%
Unduplicated youth raise a protective factor (i.e. a developmental asset) in the WSJCA Risk Assessment in the domains of Education and/or Employment.	11	0	0%
Unduplicated youth receive positive performance evaluations regarding work relationships and are evaluated as demonstrating "good" or "excellent" job competency skills by end of internship or group project.	161	0	0%
Unduplicated out-of-school youth re-enroll in school, a GED program or post-secondary educational/ vocational program.	6	0	0%

Note: Employment is offered primarily in the summer.

Mentoring

INDICATORS:	2011 Planned Target	January Actuals	% Completed
Number of youth participating in mentoring	143	93	65%
Number of new matches in 2011	50	3	6%
85% of middle school matches spend an average of 2 hours together per week	78	52	67%
75% of middle school youth involved in a match for 12 months increase school attendance*	23*		
75% of middle school youth involved in a match for 12 months decrease disciplinary actions.*	23*		
75% of matches last 3 months (includes matches made between October – December 2010 and January – September 2011)	42	8	19%
50% of matches made in 2010 last 12 months	47	2	4%

*Will be assessed at mid-year and at the end of the school year. Dependent on finalized MOA with SPS.

2011 Referral, Intake and Screening by Network not yet available.

Additional Indicators:

Parks 2011 Targets not yet finalized.

Street Outreach (YMCA Contract)

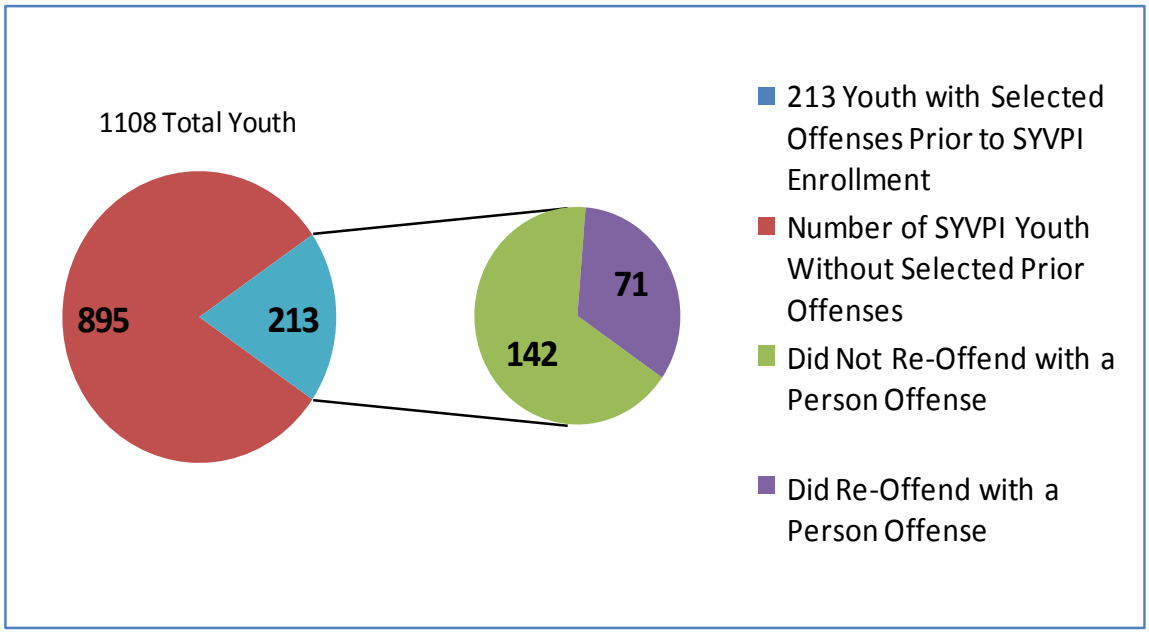
Street Outreach Indicators:	2011 Targets	January Actuals Not Yet Available	% Completed
1) Number of high risk youth contacted, engaged and/or re-engaged by Outreach Team within Southeast, Southwest and Central Areas	150		
2) Number of valid referrals to Initiative completed by Outreach Team	75		
3) Critical Incident Response to 100% SPD notifications of violent incidents involving youth or gang members in or from any of the three neighborhoods and filing of follow up reports for all critical incident responses.	TBD*		
4) 50 middle school youth will participate in Alive & Free Violence Prevention classes and will demonstrate reduced involvement in high-risk behaviors and increases in developmental assets and protective factors noted below:**	50		
5) 50% of youth served in A&F classes will report decreased involvement in gang and criminal behaviors	25		
6) 65% of youth served in A&F classes will increase in school attendance and participation.	33		
7) 65% of youth served in A&F classes will demonstrate increased skills in peaceful conflict resolution.	33		

*Total number of Critical Incidents to OFE by SPD on December 5, 2011. SYVPI Director will correlate this information with YMCA's CIR reports.

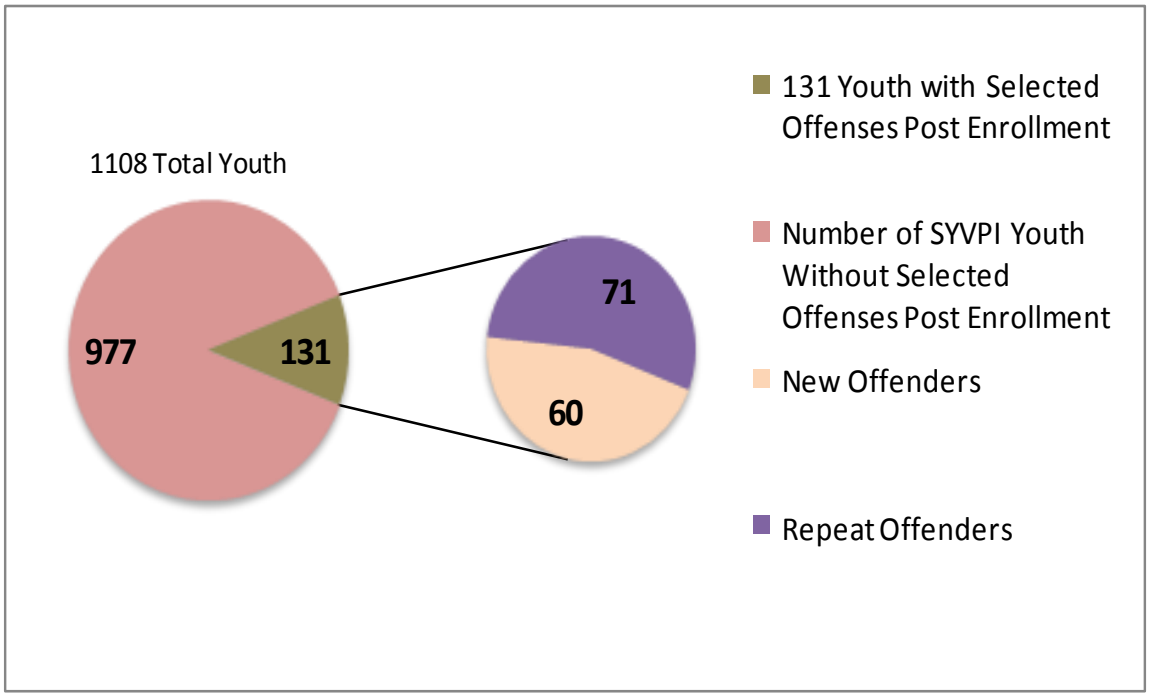
**YMCA to use pre/post surveys and attendance/school behavior records to substantiate all performance pay for # 5, 6, and 7 above

Juvenile Court Referrals of Initiative Youth

SYVPI Youth Offenses Prior and Post Enrollment



SYVPI Youth Offenses Post Enrollment



Update on UCLA Evaluation

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Date: March 8, 2011

To: Mariko Lockhart, Director, Seattle Youth Violence Prevention Initiative

From: Paul Hsu, Billie Weiss, UCLA School of Public Health

Re: Seattle City Council memo dated 2/28/2011

This update will report on the progress of the comparison city selection for the Seattle Youth Violence Prevention Initiative (SYVPI). The first portion of the report will introduce background information, followed by steps taken so far, and then conclude with specific comments in response to the memo.

Background

In general, the randomized clinical or experimental trial (with appropriate levels of blinding) is the currently accepted study design for evaluating the effectiveness/efficacy of an intervention. However, the randomized trial has some limitations for community interventions. First and foremost, it is generally not feasible to randomize the treatment among communities. Whereas individuals can be randomly selected to receive either the treatment or an ethical alternative (for example, standard care or placebo); by its nature, a community intervention is often implemented in those areas with the greatest need. (It can also be argued that given multiple geographic areas with deficits, it may be unethical to provide one area with a program and not do so for others).

A second related factor is sample size. In studies of individuals, sufficient numbers of persons must be enrolled to ensure that results are statistically valid. The required sample size is a calculated value (often called "power calculations") that takes into account multiple factors: estimating the level of effect, specifying acceptable levels of different types of errors, etc. All other factors being equal, a study on 1,000 individuals would have higher statistical power than a study on 10 persons. For community trials, sample size calculations are often not performed unless there is a clear indication. At the individual level, most programs have minimal control over enrollment of eligible participants; they can only document those who actually enroll. Furthermore, at the community level, it is often cost-prohibitive to enroll multiple cities or municipalities.

Because other limitations exist, a quasi-experimental evaluation design is often utilized. Since the intervention area is usually pre-determined, a similar "control" region is selected for comparison. It is not necessary for the comparison region to be similar in all respects, only those that have a bearing on the desired outcome. For example, if the outcome were rates of influenza, then matching the proportions of males and females in the two regions is probably not important unless it can be argued that one gender is more susceptible to the flu than the other. If the outcome were perpetration rates of

crime, however, then the proportion of males in the two regions should be similar, since male gender is a "risk factor" for perpetration.

Methods

The following is an outline of the general criteria/steps used for selecting a geographic comparison for an "experimental" site where an intervention is being implemented/evaluated. The goal is to find a comparison site that "matches" the experimental site as much as possible in order to make an inference about the effectiveness of the intervention. Each step below is followed by a description of the SYVPI work so far.

(As in epidemiological studies, the more risk factors that are matched, the stronger the likelihood that one can attribute any observed changes to the intervention itself. However, the larger the number of factors, the greater the difficulty in matching sites; and factors that are matched can no longer be evaluated).

1. **DEFINE REGION.** Clearly define the boundaries of the intervention region. If possible, ensure that boundaries are contiguous with standard geographical designations or reporting areas (census tracts, zip codes, police reporting districts, service planning areas, etc). Boundaries should also be chosen with regards to the potential outcomes to be selected. For example, if the intervention or study population is school-based, then school district boundaries may need to be considered and similarly for a hospital-based intervention (the hospital catchment area should be evaluated).

   The region was previously defined by SYVPI and includes the Central, Southeast, and Southwest communities. Specific census tracts were provided to the UCLA evaluation team and a database has been compiled that documents the baseline characteristics of the intervention region. Variable domains include demographics, social economic status, school profiles, and court referrals.

2. **IDENTIFY OUTCOMES**. Once boundaries for the intervention region are defined, the best indicators or "outcomes" to measure the progress or effect of the intervention should then be identified in consultation with study investigators (i.e., teen pregnancy rates if it's a teen pregnancy prevention program). Ideally, these would be variables that are already being collected in a systematic and relatively consistent manner (school test scores, reported crimes, etc) and that are readily accessible for both the experimental and comparison sites. Primary surveys may be necessary, however, if community or individual perception, knowledge, attitudes, and/or behavior changes are the desired outcomes.

   Outcomes were previously selected by SYVPI, for example, a 50% reduction in court referrals for juvenile crimes against persons committed by youth residing in the Central, Southeast, and Southwest areas of the City, and a 50% reduction in the number of suspensions/expulsions due to violence-related incidents at specific area middle schools (from evaluation plan).

3. **REVIEW RISK FACTORS.** After outcomes have been identified, the risk factors for those outcomes are then reviewed. What are the previously identified risk factors (if any) for these outcomes? Are there characteristics that have the potential to be risk factors? The objective

here is to assess the items that need to be "controlled for". (Since the ultimate goal is to be able to attribute any changes to the intervention, we want to "rule out" the things that can affect these outcomes).

In consultation with SYVPI and its working group, many factors were considered as potential risks or confounders for the identified outcomes. Among those factors, the consensus was that the following items should be a higher priority: proportion that is African-American (both among the general population and within the offender population), percent reduced lunch and/or unexcused absences within the relevant schools, the number of referrals and/or arrests, and the dropout rate and/or graduation rate by ethnicity for area high schools.

As an example, the rationale for percent reduced lunch within the schools was to account for the potentially discrepant income levels. The working group believed that this would be a better reflection of the participants in SYVPI than the poverty rate or the average household income within the intervention areas. (Therefore, the comparison area should include schools with similar levels of percent reduced lunch).

4. **RANK RISK FACTORS**. The identified risk factors from the previous step are generally ranked in order of most-established evidence. Because it is usually difficult to match on multiple factors, it is helpful to prioritize. If 'presence of firearms in the household' and perpetrator age/gender are well-established risk factors for unintentional discharges (in that specific order), then 'presence of firearms' should take precedence when matching (followed by age and gender). While ranking factors based on the evidence is generally the default, it is also possible to revise the order based on external or other *a priori* information.

   The working group created an initial ranking that will be used for matching potential comparison areas. We are in the process of ascertaining whether the data to be used for matching will be available for the comparison areas. For example, we have recently contacted the King County Juvenile Court system for data on the cities of Burien, Renton, and Brynmar/Skyway (all potential comparison sites).

   While the Memorandums of Understanding and other data-sharing agreements for the intervention areas (all in Seattle) have been useful, we do not have the same accessibility to data for potential comparison sites, so we have been contacting the potential regions on an as-needed basis. If the data are not available, we will have to revise the ranking accordingly.

5. **SELECT COMPARISON.** Once risk factors are ranked, a comparison location can then be selected using the following general algorithm.

   a. Establish a tolerance level for each risk factor. For example, with three matching variables, matching to within ±5% for the primary factor, 10% for the secondary, and 15% for the tertiary may be desirable. If sample statistics are available to calculate confidence intervals, then those intervals may be used also (e.g., the primary factor to within 95% confidence, the secondary to within 90%, etc).

b. Create a list of all potential comparison regions that meet the above criteria. Using the unintentional firearm discharge example from above, a list of sites where the percentage of 'presence of firearms' was within ±5% of the experimental site, the age to within 10%, etc, would be compiled.

c. Select one or more comparison sites as necessary from the compiled list using random selection methods.

The above steps may be iterative: tolerance levels may be expanded if no comparison sites meet the original criteria. The goal is not to match on every single variable (which is difficult anyway), but on those risk factors that have been previously identified. It is less important to match on outcomes or indicators: these variables become the baseline for the pre-intervention period. For example, neighborhood crime levels, when used as an outcome, do not necessarily have to "match" since it is the **change** in crime levels that will be compared before and after the intervention (caution: neighborhood crime levels can also be used as a risk factor/matching variable so findings must be interpreted carefully).

This last step has not been completed, but assuming that the necessary data are available, we anticipate control selection by March 31st.

April 15th – preliminary analysis (usually performed on a subset of the initial data to identify any data linkage or inconsistencies, allows for coding and testing of syntax for potential statistical analyses).

May 1st – initial draft of report (documentation of data sources, baseline indicators, variable selection methods, etc. has been ongoing and will continue as the comparison city selection process is completed).

Comments

When variables include both individual-level risk factors (such as age or gender) and also community-level factors (such as neighborhood crime rates or average household income), one possible statistical technique is to perform a "multilevel" analysis. This method can help evaluate a specific outcome while simultaneously considering both individual and community factors (Snijders and Bosker, 1999; Bickel, 2007).

Unfortunately, this technique can only evaluate the intervention as a whole and not the elements that make up that program. If the neighborhood factors are ignored and a more conventional analysis is calculated, two issues should be kept in mind. First, there may not be enough enrollees in any one particular component to allow a valid inference (computations may be possible, but the subsequent conclusions may be invalid due to insufficient numbers). We have already encountered a related limitation in the juvenile offender data for Seattle. When the records were tabulated by age, gender, and race/ethnicity, there were so few numbers in some categories that there was a potential for confidentiality to be compromised. Subsequently, those categories had to be collapsed into larger (more general) groupings, substantially limiting analysis and interpretation.

Second, evaluating elements separately may mask any synergistic or antagonistic effects. For example, the components of the program may not show any effect individually (or only show a small, trivial effect) but taken together, may show a statistically significant effect (synergistic – the whole is greater than the sum of the parts). Conversely, each module may produce measurable results, but those results could interact in unforeseen ways as to cancel or reduce the overall effect (antagonistic). Therefore, even if the program as a whole is shown to be effective, that effectiveness may or may not be attributable to one (or more) elements of the program.

Proper evaluation of the sub-components requires measurement and tracking of the specific outcomes originally designated by those respective modules. For instance, a national evaluation of Big Brothers Big Sisters (BBBS, one of the evidence-based "Model" strategies being replicated by SYVPI) found that participants were almost one-third less likely than non-participants to hit someone. However, this was only one of multiple positive outcomes after an *eighteen month* period. Other BBBS outcomes (such as less likely to initiate drug or alcohol use, more likely to have higher quality relationships with parents, guardians, or peers, among others) are not being documented here.

The primary outcome for SYVPI is a reduction in community violence (as measured by various indicators over time), so it is quite possible for BBBS to be "effective" in terms of reducing substance abuse at the individual level (for example), but to have little or no effect on overall violence at the neighborhood level in the Initiative's timeframe. Incidentally, the number of SYVPI youth committing violent crimes and/or arrested for crimes with firearms are both Initiative indicators, but again, these only reflect one aspect of the potential benefits of BBBS. Further documentation and work (and the appropriate time period) would be required to properly evaluate BBBS (and other elements) individually in this population and setting.

At the same time, it may be possible to describe (within privacy limits) those participants still enrolled after three months, or six months, etc, and in which modules. In other words (and assuming that program retention is beneficial), a comparison of the baseline population and the participants at designated intervals could show those who have remained in which programs. It could also highlight those enrollees who have dropped out and thus provide feedback to case management on those who may be most at-risk. Similarly, an analysis of the employment indicators could generate analogous retention/drop-out information and thus provide data on the group for which the program has been most effective (i.e., defined as those who have remained employed).

We sincerely hope that this update, along with the background and steps taken so far, will be useful for the Council, and we welcome any opportunity to further discuss the evaluation of the Seattle Youth Violence Prevention Initiative.